In the specification:

Replace the paragraph running from page 5, line 21 through page 6, line 20 with the amended paragraph below.

Detailed description of the invention

Thus, in a first aspect, the present invention relates to an isolated Nurr1 gene including one or more mutations selected from the group consisting of Met97Val (M97V), His103Arg (H103R), Tyr121del (Y121del) and Tyr122del (Y122del), or a functional fragment or variant thereof. The fragments encompassed by the present invention may comprise one or more of the present mutations surrounded by wild-type sequence or adjacent to wild-type sequence on one side thereof. In this context, reference is made to Figure 1 showing an overview of the genomic structure of Nurr1 and the mutations according to the invention. The human Nurr1 gene is comprised of 8 kb as 8 exons and 7 introns located on chromosome 2q22-23, see Ichinose et al., *Gene* **230** (1999) 133-239, which gene has been deposited in the DDBJ/EMBL/GenBank with accession number AB017586. (For the entire sequence of mouse Nurr1, see Castillo *et al.*, *Genomics* **41**, 250-257 (1997), Fig. 1, accession no. U86783.) In one embodiment, a fragment according to the invention comprises all the exons of the Nurr1 gene, *i.e.* all of the cDNA sequence thereof. More specifically, as the herein defined novel mutations are present on exon 3, in one embodiment, a fragment according to the invention comprises at least exon 3 of Nurr1. Specific embodiments of the first aspect are fragments comprising the mutation Met97Val, wherein ~~a G~~ an A in the first position of codon no. 97 has substituted ~~an A~~ a G in said position, the mutation His103Arg, wherein ~~a G~~ an A in the ~~first~~ second position of codon no. 103 has substituted ~~an A~~ a G in

said position, or the mutation Tyr121del or Tyr122del, wherein a codon for tyrosine has been deleted at position 121 or 122. As easily appreciated by the skilled in this field, and as further discussed in relation to figure 2, the last mentioned deletions are impossible to differentiate from each other, and therefore they will be denoted Tyr122 herein. The present fragments may include any suitable length of the Nurr1 gene depending on the intended use. Further, in the present context, it is noted that the present invention relates to mutated Nurr1 genes of human and mouse origin, irrespective of whether it is written in capital letters or not. Various advantageous uses of the present genes and fragments will be discussed in further detail below.